SERVED: March 31, 1994

NTSB Order No. EA-4025

UNITED STATES OF AMERICA NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD at its office in Washington, D.C. on the 16th day of March, 1994

DAVID R. HINSON,

Administrator, Federal Aviation Administration,

Complainant,

v.

PETER F. SCHMIDT,
VINTON K. ULRICH, and
RICHARD J. KNOWSKI,
Respondents.

Docket SE-11577 SE-11569

SE-11581

OPINION AND ORDER

Respondents have appealed from the oral initial decision of Administrative Law Judge Jerrell R. Davis, issued on September 6, 1991, following an evidentiary hearing. The law judge affirmed orders of the Administrator, suspending respondent Schmidt's

¹The hearing began on June 6, 1991 and, in light of evidence respondents introduced that was not available to the Administrator during discovery, was continued to September 6, 1991. The initial decision, an excerpt from the hearing transcript, is attached.

airline transport pilot (ATP) certificate for 30 days, suspending respondent Ulrich's ATP certificate for 20 days, and suspending respondent Knowski's flight engineer certificate for 10 days. The Administrator's orders alleged, and the law judge found, that respondents had violated 14 C.F.R. 121.315(c) and 91.9.² We allow the appeal and reverse.

Respondents Schmidt, Ulrich, and Knowski were, respectively, pilot-in-command (captain), first officer (copilot), and second officer (flight engineer) on Delta Air Lines' Flight 550, Boeing 727-232 service from Cincinnati to Detroit. According to the Administrator, on departure from Greater Cincinnati International Airport respondents initiated a takeoff roll without extending the flaps. The Administrator alleges that, only after the aircraft's safety warning horn alerted respondents to this fact did they reduce speed, engage the flaps to the required 15° position, and complete the takeoff. There is no dispute that the

²Section 121.315(c) provided that the flight crew shall follow approved cockpit check procedures when operating the aircraft. Section 91.9 (now 91.13(a)) provided that no person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another. In this case, the § 91.9 violation is residual to the operational violation. See Administrator v. Pritchett, NTSB Order EA-3271 (1991) at footnote 17, and cases cited there.

flight manual checklist required that the flaps be engaged before the takeoff roll and, therefore, it is clear that, if the flaps were not properly extended at the time of takeoff roll, a violation of § 121.315(c) would be established.

The Administrator's case is based on the eyewitness testimony of a passenger in seat 22-F of the aircraft, Mr. Dennis Watts. Mr. Watts is a frequent flier, having flown approximately 1 million miles, half of them in 727s. He testified to his belief that the aircraft had begun its takeoff roll with the flaps retracted. He based this belief, he stated, on the amount of power he felt being applied (thrusting him back in his seat), on the aircraft's alignment on the runway, and on his observation of the trailing edge flaps. Aircraft power was then reduced dramatically, and Mr. Watts heard a hydraulic motor and almost immediately saw the flaps extending.

Respondents base their defense on their own testimony as to the events of the Cincinnati departure and what they see as various discrepancies and uncertainties in the testimony of what they argue is a mistaken passenger. There is little other evidence; no other passengers from the flight in question testified. The Administrator did offer testimony of an FAA inspector, who opined that if the departure of Flight 550 occurred as supposed by passenger Watts, then a violation had probably occurred. But this inspector also testified, in response to examination by respondents' counsel, that passenger Watts could not have observed the circumstances he claimed to

have observed in the manner that he claimed to have observed them. Thus the inspector's testimony, if it added anything to the hearing other than the undisputed proposition that a takeoff roll without flaps was not permitted by the Delta manual, added only a reason for skepticism about the quality of the passenger's observations.³

In sum, the evidence in this proceeding consists principally of the testimony of respondents, on the one hand, and the passenger Watts on the other. Consequently, a decision requires a careful weighing of these conflicting accounts. Unfortunately, the initial decision provides little insight into the law judge's analysis of the respondents' side of the case. After a summary review of the evidence, without analytical comment, the law judge opined in an abbreviated "Discussion and Conclusions" that passenger Watts was to be believed because he was the least self-serving and most disinterested witness. This statement

³Inspector Nutter also appeared to believe that it was contrary to Delta's operations manual to proceed onto the runway without first extending the flaps per the taxi checklist. If this were so, a violation of section 121.315(c) would have been established even under the crew's reconstruction of Flight 550. But Inspector Nutter conceded on cross-examination that the manual did not require flap deployment before taking the runway, although it suggests that it would be normal to have done so. Tr. 178-79, Ex. C-7.

⁴Naturally, a judge is entitled to consider a witness's interest in a proceeding in weighing credibility and we would assign no fault for so doing. But just as certainly, we cannot establish a mechanical standard under which the testimony of the least interested observer is automatically given the most weight regardless of its objective worth, as this is a formula under which respondents, however truthful, could rarely succeed.

represents the entirety of the reasoning offered by the law judge in his decision, other than a brief attempt at reconciling what the judge recognized to be a faulty recollection by passenger Watts of his opportunity to observe the aircraft wing and runway edge.⁵

The Administrator defends against appeal largely by casting the argument as one of credibility, relying on the Board's longestablished reluctance to overturn the credibility determinations of its administrative law judges. Administrator v. Smith, 5 NTSB 1560, 1563 (1987) (resolution of credibility issues, unless made in an arbitrary or capricious manner, is within the exclusive province of the law judge). We do not think credibility is controlling here. Had the decision below been more expansive in its discussion of the conflicting and plausible explanation offered by the crew, or, indeed, were we confronted with explicit negative findings regarding the testimony of the crew, then the argument of the Administrator might be enough. But with all the difficulties discovered in the testimony of passenger Watts, witness credibility must be carefully weighed against sufficiency of evidence. We can take the law judge's word for the fact that passenger Watts was sincere, and in that sense credible, but the possibility remains that he may have been sincerely mistaken. Without a detailed examination of the evidence, this difference

⁵Elsewhere in the transcript (Tr. 208) Judge Davis indicated that the passage of time made it less than surprising that passenger Watts could not remember how he saw what he claimed to have seen and that this did not impinge on his sincerity.

cannot be determined.6

Because this matter has already been through a lengthy hearing process, with a continuance to allow the Administrator additional opportunity to prepare a rebuttal of respondents' evidence, and because we are now six years removed in time from the incident itself, we do not believe a remand for further proceedings would advance aviation safety or the public interest. As the Board is the ultimate finder of fact, even as to credibility, under the Federal Aviation Act, we have chosen to resolve the matter as the record stands. We have, therefore, considered in detail the evidence of record and the entirety of the proceeding below. After review, we cannot conclude that the Administrator has carried the burden assigned him in these proceedings, and we will reverse the conclusions of the law judge and dismiss the Administrator's complaint. We do not believe that there is a preponderance of evidence for the Administrator's claim.

During trial there were two versions offered of the takeoff

⁶The law judge indicated that his decision was based on the weight of the evidence deemed most credible, raising the possibility that he concluded alternative explanations for the perceptions of passenger Watts did not merit credibility. The opinion does not, however, elucidate the point. In any event, we do not believe that the same deference that we typically pay to witness demeanor findings is owed a law judge's analysis of technical evidence. See Kopac v. N.L.R.B., 668 F.2d 946 (7th Cir. 1982). We do not intend any departure from Board precedent on the demeanor issue, as that precedent has always been premised on the law judge's exclusive opportunity to observe witnesses.

⁷Chirino v. N.T.S.B., 849 F.2d 1525, 1532 (D.C. Cir. 1988).

of Flight 550. Passenger Watts recalled a rapid taxi without stop to the runway, and takeoff acceleration interrupted briefly for the extension of flaps and then resumed to liftoff. The crew, not all of whom recalled all details but all of whom had recollections that were internally consistent with one another, described a different departure: taxi to a two minute hold for departing and incoming traffic, an acceleration up onto the runway during which final checklist items were concluded, a late but lawful deployment of the flaps as a result of checklist inquiry, and a "rolling" takeoff which was commenced only after the checklists had been completed and transfer of aircraft control had been positively achieved between captain and the first officer as flying pilot.

Respondents sought to explain or discredit the observations of passenger Watts in several ways. They first put on the record that passenger Watts had been flying all night prior to Flight 550 which was the early morning continuation of his "red eye" trip back from the coast. Except for naps in flight, he had not slept for 24 hours. It was also established that passenger Watts had read and seen accounts of a recent, highly-publicized airline disaster attributed to a failure to deploy flaps on takeoff. And so it was argued by respondents that passenger Watts was tired and anxious and thus susceptible to seeing what he feared.

Respondents also argued that passenger Watts could easily have

been confused by the acceleration up onto the runway, 8 and that his seat was on the turning axis of the aircraft allowing him to be confused as to acceleration or deceleration during a turn. 9 The law judge's decision is silent on these matters.

Respondents also sought, with some success, to demonstrate that passenger Watts could not have seen what he claimed to have seen, as he claimed to see it, and that some of his observations were inconsistent with the Administrator's complaint, but instead

⁸ The evidence is that an inclined approach to the runway required the application of sufficient thrust to trip a warning horn triggered by the absence of a flap configuration suitable for takeoff. It is uncontested that this was not an uncommon event as engine pressure ratios substantially below takeoff thrust are sufficient to trigger the horn in an improperly configured aircraft. This horn was not heard by passenger Watts, but it resulted in a reduction of thrust that could have been felt in the cabin. According to the crew, the flap extension had already commenced at the time the horn went off. (The horn will sound when flaps are below five degrees, even if flap deployment has already begun.)

⁹This is not an insignificant point. Passenger Watts' original recollection of events, captured in his letter of complaint to Delta Air Lines, indicated the aircraft turned onto the runway and stopped momentarily before beginning what he believed to be its takeoff roll. But at trial, the witness voluntarily quibbled with his own earlier usage of "stopped," saying he meant a slowing of the aircraft. Respondents' argument appears to be that turning the aircraft would have been perceived by passengers seated at the aircraft's axis as a deceleration and that subsequent straight forward movement as an acceleration. (This much appears to have been conceded by the Administrator's Tr. 271.) The result would be that as the aircraft continued to taxi toward the centerline (and in this case the commencement of a rolling takeoff), a passenger at the axis could well believe that what was actually relatively unaccelerated taxiing was in fact the beginning of a takeoff roll. At least this is what respondents would have had the judge believe, because it is during this period of perception of acceleration that passenger Watts heard the flap hydraulics and noticed their extension.

consistent with the crew's recollection. Indeed, the trial was interrupted by a three-month continuance so that the Administrator could review pictures taken from inside a Delta 727-232 aircraft which respondents offered as a demonstration that passenger Watts could not have seen the flaps as he claimed to have seen them. While the Administrator initially objected to the introduction of these photographs most vigorously, they were, after continuance, admitted, and it was conceded by the Administrator's expert witness that passenger Watts could not have observed the inboard trailing flaps in the manner he alleged. It likewise appeared that passenger Watts was not seated towards the trailing edge of the wing as he had testified, but well over wing center. 10

Respondents' explanation of passenger Watts' perception proceeds much as follows. Flight 550 accelerated from its hold position on the taxiway to the runway where it turned and taxied for a short distance to align itself for takeoff. During this period the delayed start checklist¹¹ and before takeoff

¹⁰After initially indicating that respondents' photographic evidence was "devastating" and could "destroy" the testimony of passenger Watts (Tr. 214-215), the law judge subsequently rehabilitated Watts' testimony without recalling the witness. This approach leaves the record with a particularly vague basis for concluding that Watts was aware of the runway alignment at the time of his perception of the first and second acceleration. On this point, the law judge seemed prepared to substitute his own experiences for any actual evidence. Tr. 83-84.

 $^{^{11}{\}rm The}$ crew had elected to taxi with only two engines. The third was started at about the time the aircraft was cleared for takeoff.

checklists were finished. Thrust to overcome the incline to the runway resulted in the use of an engine pressure ratio in excess of 1.4, resulting in a warning horn. The horn came on shortly after the flaps had begun to extend as a result of a checklist inquiry, and to shut down the horn, thrust was reduced to idle. The aircraft would have continued forward movement, but the deceleration, in their view, would have been felt in the cabin. Because of the reduction in engine noise, the sound of the hydraulics working the flap extension might also have become noticeable. Not realizing that there is nothing uncommon about a rolling takeoff, nor that extension of flaps on the runway was not impermissible, nor that the takeoff roll would not have been

¹²In this regard, passenger Watts' testimony that he witnessed the entire extension of stowed flaps and that this took, variousl \overline{y} , a few seconds or between 5 and 10 seconds, is significant. He must, from respondents' viewpoint, be wrong about one or the other of these facts, as extension of the flaps to the 15 degree setting would require at least 15 seconds. It is probable, say respondents, that the flaps had already begun deployment before being noticed by Watts, but because the initial movement is parallel to the wing surface, Watts could believe that deployment had not commenced. Hence, from respondents' viewpoint, Watts' adamant insistence on a short time frame for extension is proof, from his own mouth, that extension of the flaps had begun before the deceleration noticed by Watts. significance of this is that, if a warning horn caused the abort of a takeoff roll, the flying pilot, one of whose hands will be on the throttle, will reduce thrust before the flap handle is But if the flaps have been actuated as a result of the actuated. accomplishment of a checklist and thereafter thrust is reduced to alleviate a warning horn which may nevertheless sound until a deployment of 5 degrees is reached, then full extension of the flaps could be accomplished within a few seconds, or 5 to 10 seconds, after the reduction, as variously stated by Watts. this is a scenario far more consistent with the respondents' case than the Administrator's complaint.

commenced until the taxiing captain positively transferred control to the flying first officer, the temporary deceleration and the continued deployment of the flaps could have been perceived as a partial abort of takeoff roll for their deployment. So respondents would have us believe.

This is not an implausible explanation. Of course, the possibility of an interrupted takeoff roll is also there. the heart of the evidence for an interrupted takeoff roll is the testimony of a passenger who was not technically knowledgeable about the aircraft's systems, whose powers of observation may have been diminished by a largely sleepless journey, whose anxiety level was possibly high, who could not correctly remember where he sat or how he saw what he claimed to have seen, and whose observations were seemingly inconsistent with the actual deployment speed of the aircraft's flaps. We do not think that these and other deficiencies are overcome by a simple finding of credibility, particularly when premised on the unadorned observation that he was the least disinterested of the witnesses. The law judge had himself initially observed at trial that, if respondents' photographic evidence were to be accurate, it would "destroy" passenger Watts' testimony. But after continuance, when the photographs were admitted and their accuracy conceded, the law judge simply reversed himself, finding that the witness saw what he saw somehow.

We do not think that is enough. On our review of the record, there are two plausible explanations for events offered,

there are considerable demonstrated difficulties with the testimony of the sole witness for the Administrator's version, and there is thus no evidentiary preponderance for the Administrator's case. The complaint must be dismissed.

ACCORDINGLY, IT IS ORDERED THAT:

- 1. Respondents' appeal is granted; and
- 2. The initial decision is reversed and the Administrator's order is dismissed.

COUGHLIN, Vice Chairman, LAUBER, HAMMERSCHMIDT and HALL, Members of the Board, concurred in the above opinion and order. VOGT, Chairman, did not concur, and would have affirmed the initial decision.